



“HOME”

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Assessment 3: Otherwise Impossible
Course: Digital Form and Fabrication

Background research



Isotope Design, Topography tables



Kim Harty, Networktopia, 2012



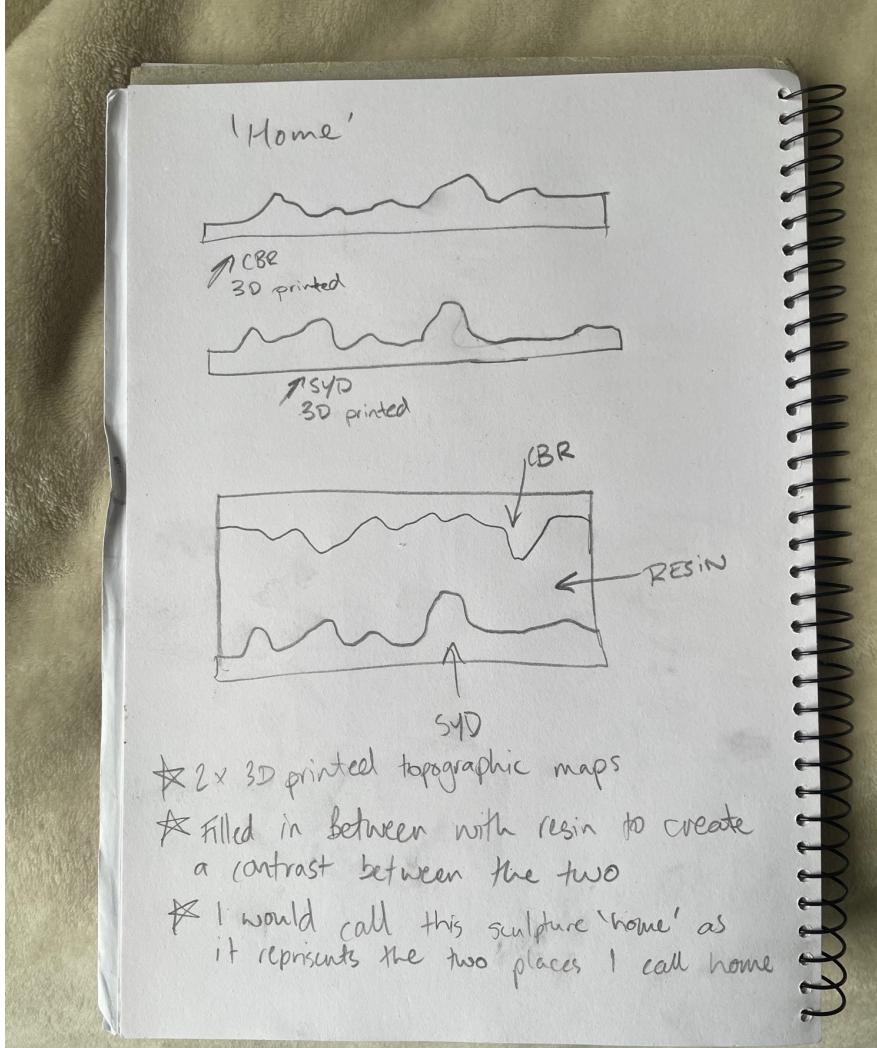
Tile map of San Francisco

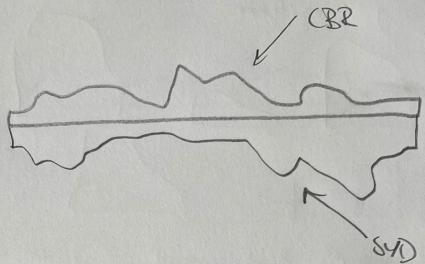


Carlos Garaicoa, Photo-topography, Madrid, 2011

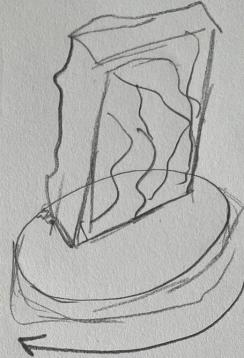
Design / idea development

On the Next couple of slides are my design ideas and development, what started with maybe using resin went to placing the objects back to back, I thought that this created more of a connection between both Sydney and Canberra as both these places are connected to me.





- ★ Put the two topographic Maps back to back
- ★ Creates like a reflection of it self
- ★ It also connects the two places together creating a link



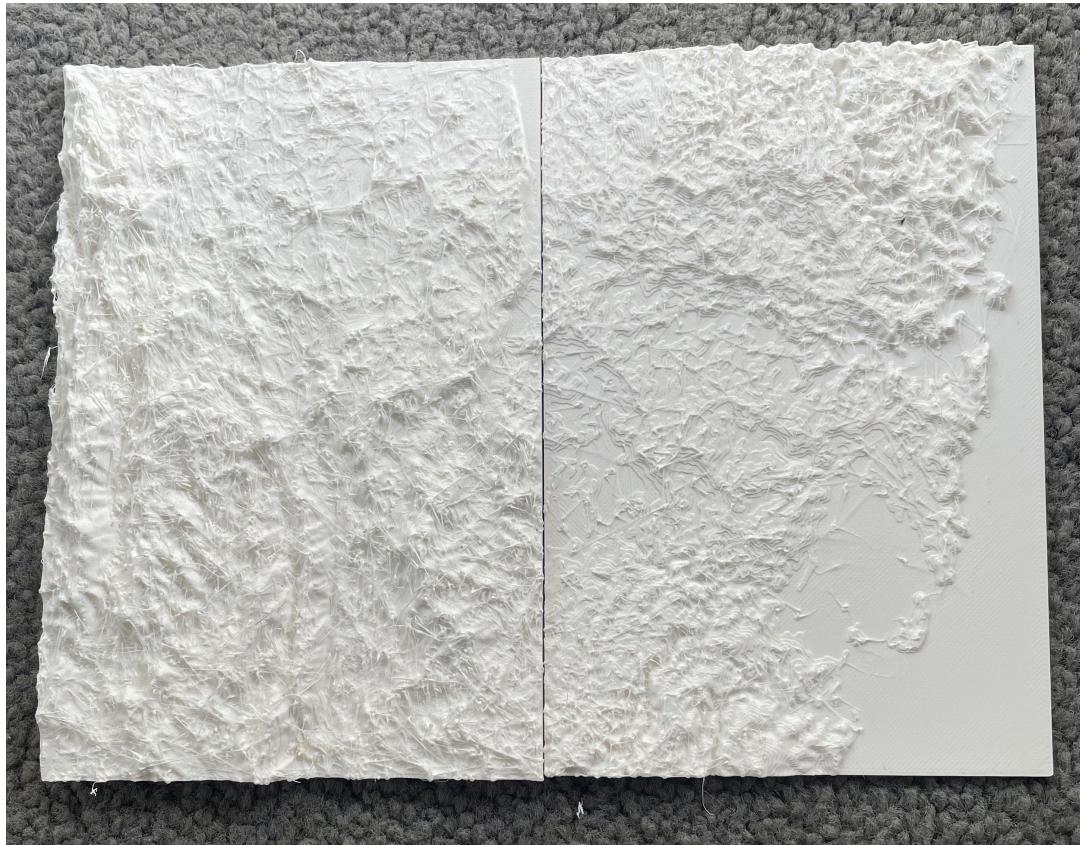
- ★ Have a platform that holds the 3D printed maps together
- ★ This can then spin and showcase each side
- ★ Could be a nice way to present

Iterative and Creative Development



For this project I used 3D printers and I was able to use both the Ultimaker's and the Prusa's. There are definitely pros and cons to both and they both have their merit.

On the left you can see one of my failed 3D prints, this came about from not checking the PLA to see if it was tangled and as it was left overnight the PLA was snagged in itself and it failed to finish the print.



On the left you will see my Prusa 3D prints, I found the Prusa slicer a bit easier to use and quicker to print however I found that the end product wasn't quite as I wanted and there was a lot of PLA "strings" that connected in between all the crevices. This created an unfinished look and wasn't a great finish to the print.

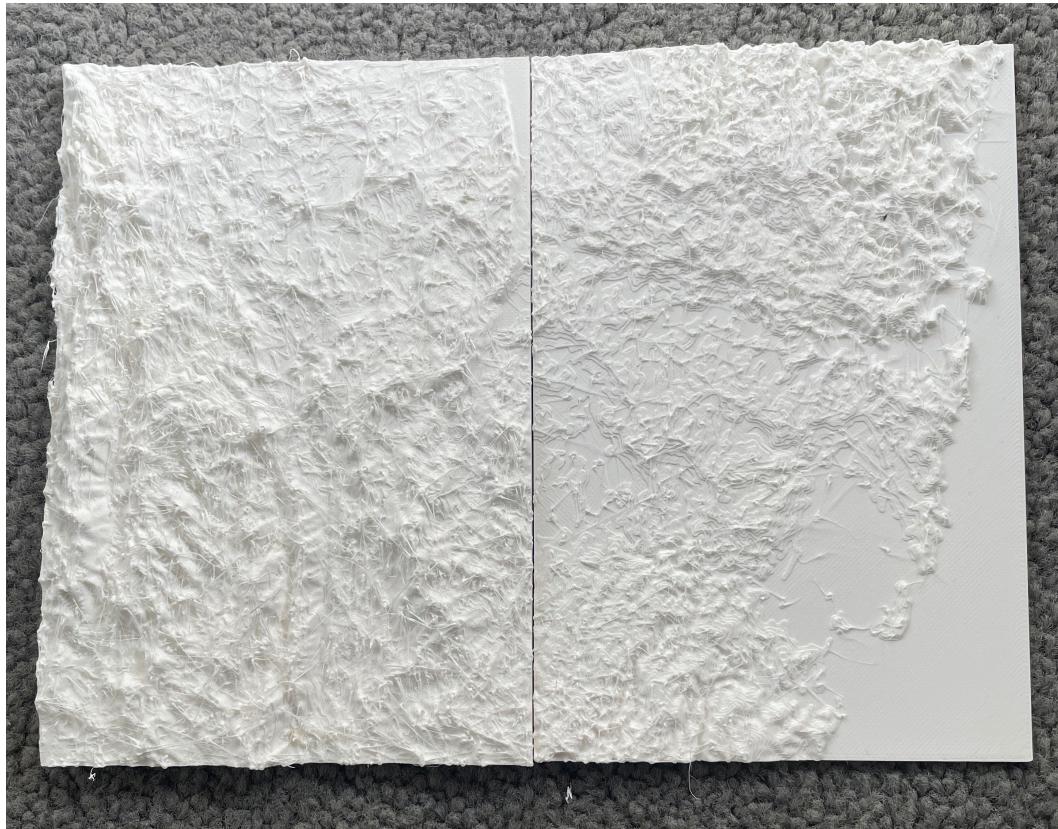


On the left here is my 3D prints from the Ultimaker, I found the Ultimaker to be a bit harder to use and take a bit longer but it produced better finer results in the end creating a topographic map that looks refined and finished.

Prototypes & development



Here we can see my first prototype. This one didn't quite work as the printer stopped printing over night, I ended up getting the PLA tangled so the printer couldn't pull any more PLA from the spool. I was pretty happy with the size



My next prototypes came out a lot better as they actually finished this time around, I wasn't a fan of the way it printed however as the 3d print had a lot of excess lines going through each print. This didn't allow the viewer to see the end product in the best way possible.

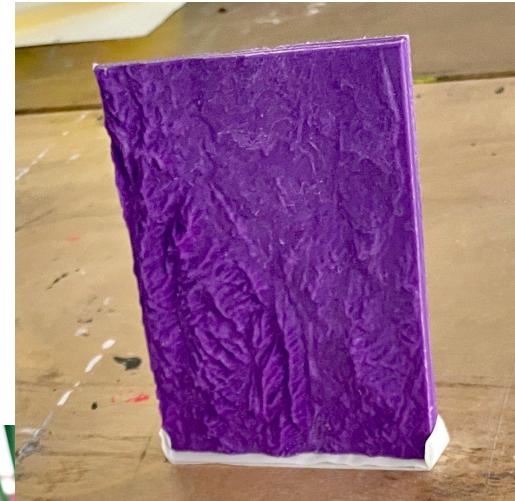


Finally after switching to an Ultimaker the prints came out quite nicely, I perhaps would've liked the prints to be a little bigger but overall I think they convey my design thoughts well

Final prototype



Here is my final design, with the two topographic maps of Canberra and Sydney back to back representing what I regard as my two homes



Group process reflection

In reflection I think I could have made my project a little bigger, I also wish I presented it in a better way in order to portray my theme better. Overall though I am quite happy with my finished product. Upon reflection however I do feel as though I overestimated my ability with fusion 360, I also wished I explored different types of materials as well as I think the 3D printing and PLA was a bit limiting. If I look back at the group project I don't think I quite hit the nail on the head with my outcome compared to what I envisioned. In the end though I had a very good time making this project and wish I had a bit more time to get the things I wanted to done in order to create the best possible product I could. I loved learning all about the different forms of digital fabrication and would love to learn even more in the future.